

TRONC-

創科電子股份有限公司

Tronc-E

Perception Unit of Microcar



自驾微型车

• Transportation Scenario & Conditions

- Self-driving on the Closed Campus: 0 km/h~60 km/h
- Dedicated road under the open field

• Self-driving functions

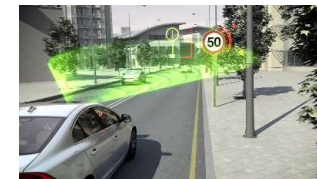
- Lane keep assistant
- Multi-object detection
- Stop & Go (0 km/h~20 km/h)
- Adaptive Cruise Control (21 km/h~60 km/h)
- Auto Emergency Braking (AEB city)(10 km/h~60 km/h)
- Traffic sign recognition (10 km/h~60 km/h)
- Self-parking on the stop (A→A)
- Position



LKS



FCW(Stop & Go)

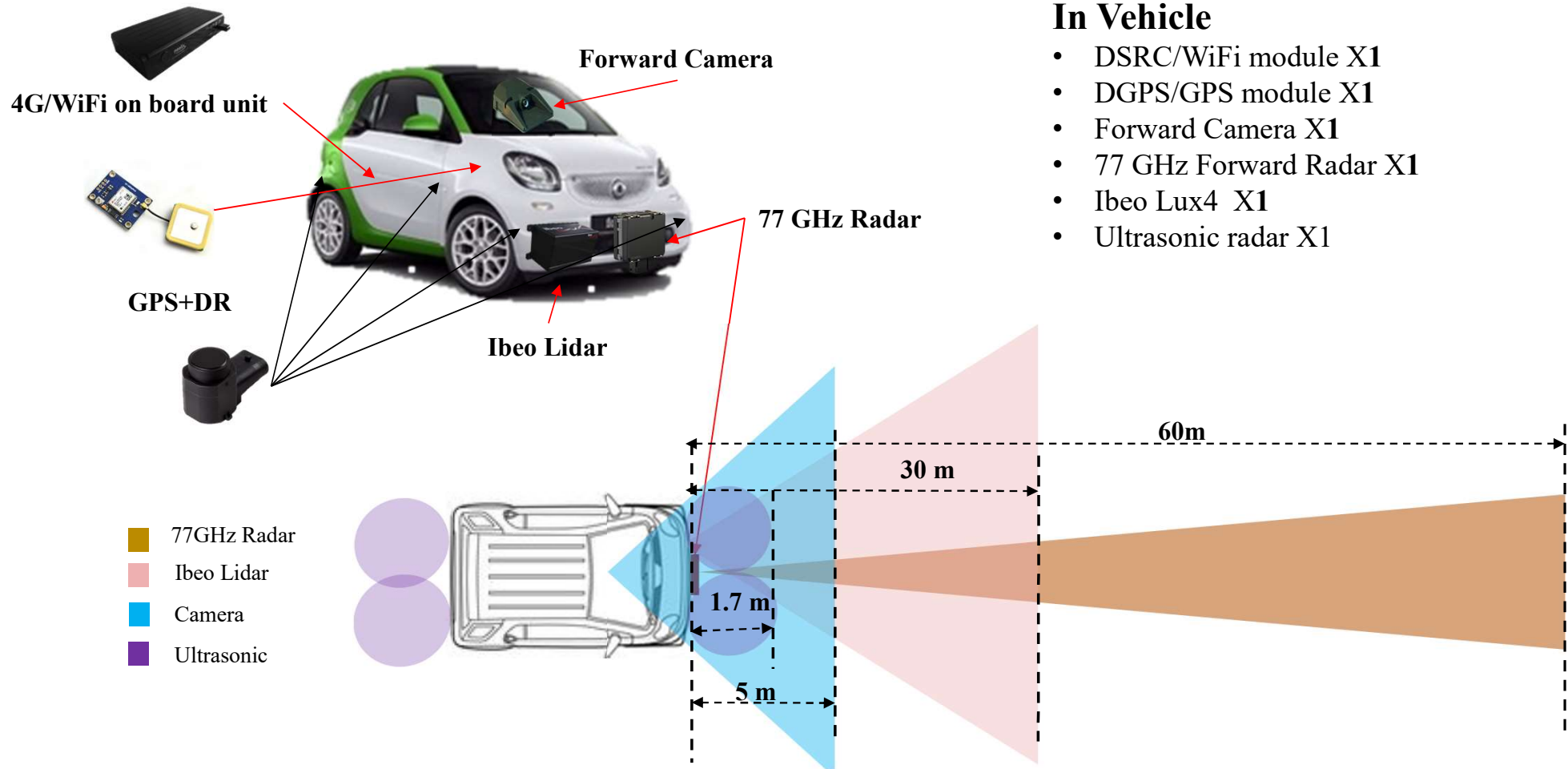


TSR (Speed limit)

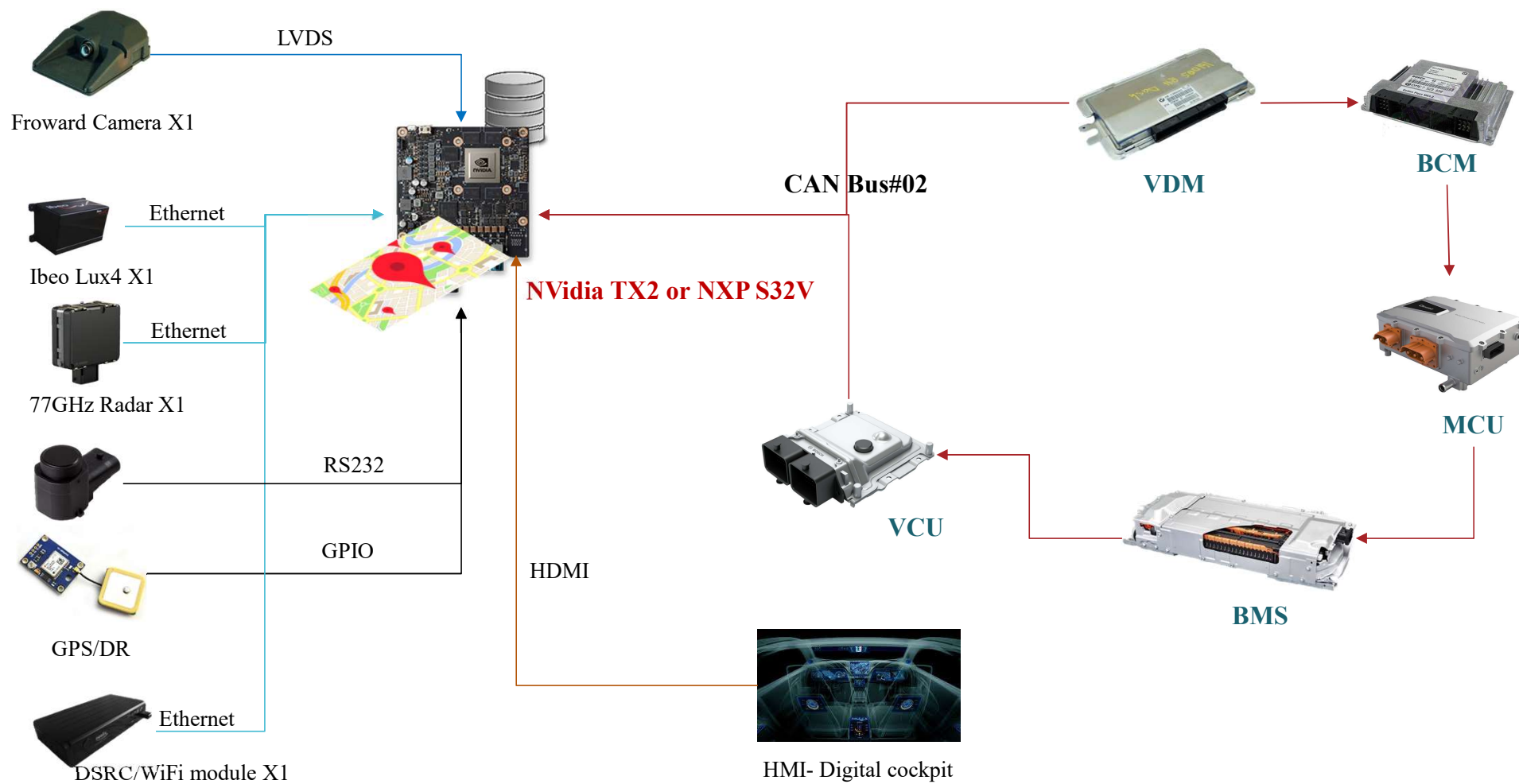


AEB

车辆传感器配置



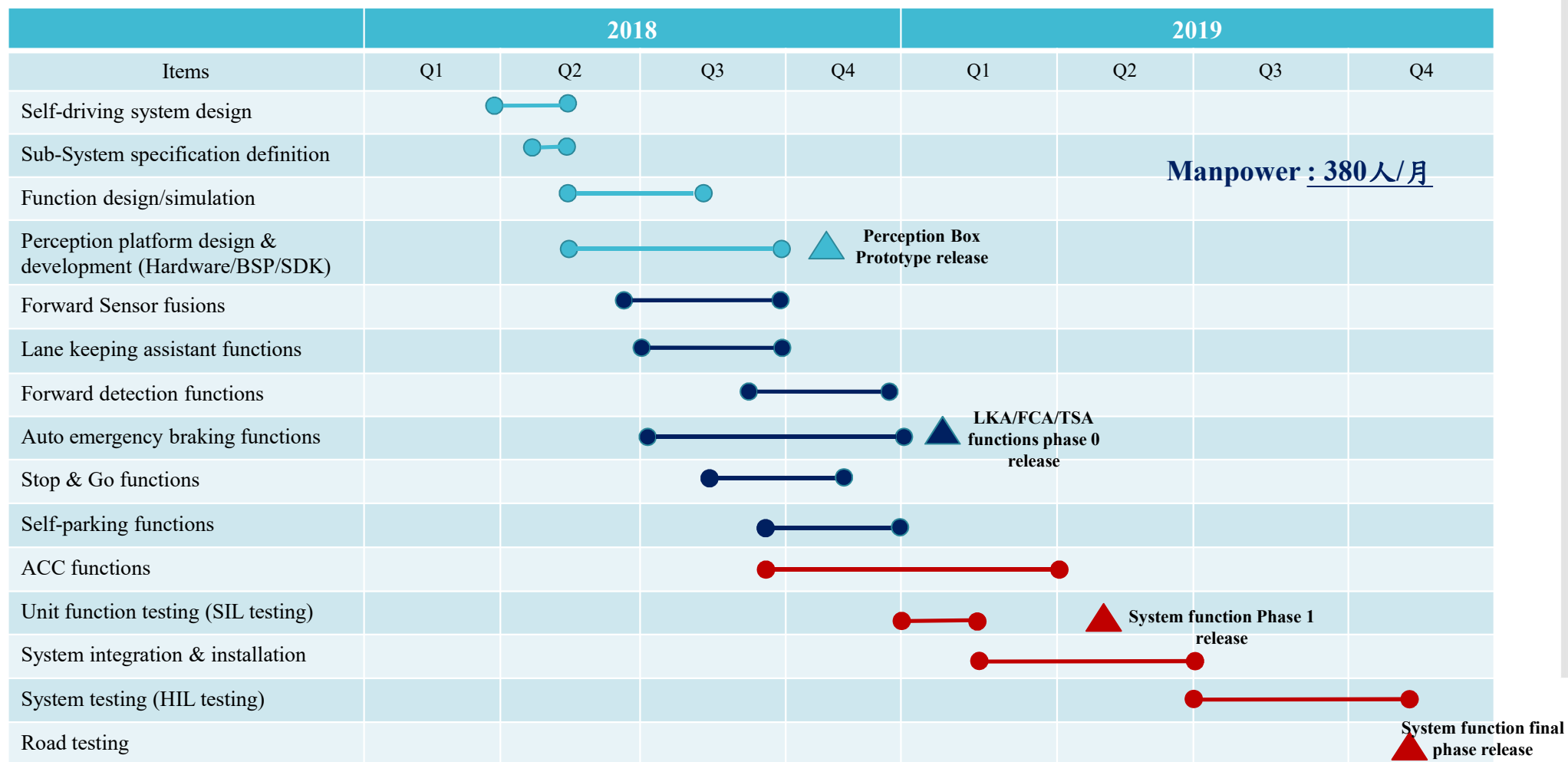
系統配置及數據串流接口



主要功能与传感器间之关系

Functions	Specifications	Sensor	Actuator
Lane Keeping	Lane detection range: 0.5~30m; max FOV:120 deg. Accuracy: +-30cm Recognition rate:>95%	720P HDR Camera	Steering mechanism
Auto Emergency Braking	20~ 60 km/h Detection range: 0.5 m~60m ;FOV: 0 deg.~130 deg.	77 GHz Radar(0.5m~60m (min.))	Braking ; Accelerator
		Forward Camera (0.5~30m, Bus/pedestrian/traffic sign)	
		Lidar (Road edge detection, Multi-object, 0.5~30m)	
Adaptive Cruise Control (ACC) (Including Stop & Go)	0~60 km/h; Detection range: 0~60m; max FOV:130 deg. Acceleration: +- 3.6 m/sec.^2 Following distance gap : 3m	77 GHz Radar(0.5m~60m)	Braking; Accelerator
		Forward Camera (0.5~30m, Bus/pedestrian/traffic sign)	
		Lidar (Road edge detection, Multi-object, 0.5~30m)	
		V2V/V2R communication	
Traffic sign recognition	20 km/h~60 km/h, detection range: 30m	720P HDR Camera	Warning: image, sound

开发期程规划

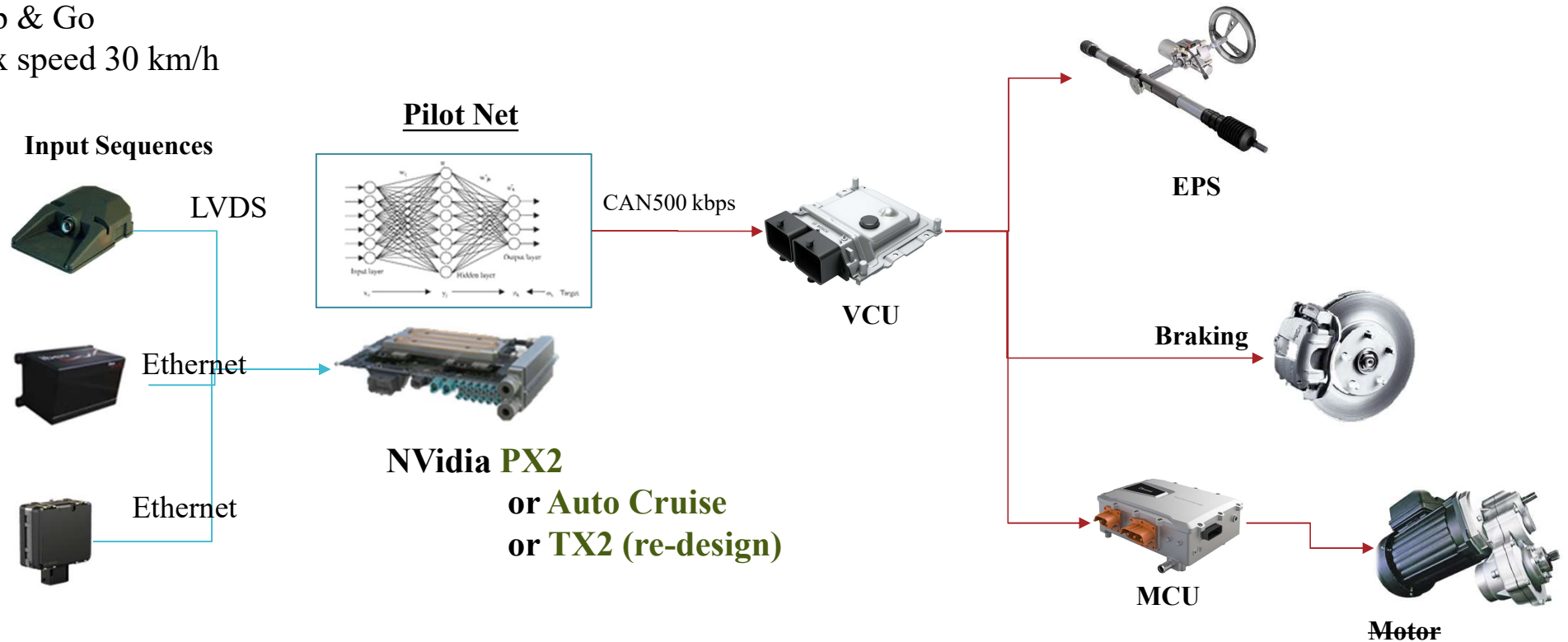


END to END Solution

for the closed field shuttle

Functions:

- Self-driving on the dedicated road under the closed field
- Stop & Go
- Max speed 30 km/h



END to END Solution Demo



Thanks for Your Attention!



No one will be injured or killed in the future...